

1 **ABSTRACT**

2 A network system includes a content provider connected to local service  
3 providers via an interactive distribution network, such as the Internet. The local  
4 service providers facilitate delivery of the content from the content provider to  
5 multiple subscribers. The local service providers schedule delivery of frequently  
6 requested content from the content provider prior to a peak time when the  
7 subscribers are likely to request the content. The content is downloaded from the  
8 content provider during the off-peak hours and cached at the local service  
9 providers for serving to the subscribers during the ensuing peak time. In this  
10 manner, the frequently requested content is already present at the local service  
11 providers and ready to be served to the subscribers before they actually request it.  
12 When the content is finally requested, the data is streamed continuously in real-  
13 time for just-in-time rendering at the subscriber computer. Another aspect of this  
14 invention involves supplementing content delivery over the Internet with delivery  
15 of content over a secondary network, such as a broadcast satellite network. The  
16 supplemental broadcast link offers additional bandwidth at a fraction of the cost  
17 that would be incurred if the local service provider installed additional Internet  
18 connections, such as T1 or T3 connections.